

AMENDMENTS TO THE CLAIMS

Claims 1-25. (Canceled)

26. (New) A method for determining whether or not a component holder is defective, comprising:

illuminating a component hold face of a component holder by emitting light to said component holder, said component hold face having an area greater than an area of a light reflection face of a component held by said component holder, wherein said component hold face corresponds to a surface of said component holder that faces a surface of said component held by said component holder, and wherein said light reflection face corresponds to a surface of said component other than said surface of said component that faces said component hold face;

performing image-pickup of said component hold face, when illuminated by emitting the light to said component holder, so as to provide image-pickup information of said component hold face when illuminated by emitting the light to said component holder; and

determining that said component holder is defective when luminance of a non-cover region of said component hold face, based on said image-pickup information, is not smaller than a setting value, wherein said non-cover region corresponds to a region of said component hold face other than a region of said component hold face covered by said component.

27. (New) The method according to claim 26, wherein

said non-cover region of said component hold face is divided into sections such that, determining that said component holder is defective comprises determining that said component holder is defective when luminance of at least one of said sections of said non-cover region, based on said image-pickup information, is not smaller than said setting value.

28. (New) The method according to claim 27, wherein emitting light to said component holder comprises emitting light to said component holder in an amount which exceeds an amount of light necessary for performing the image-pickup of said component hold face.

29. (New) The method according to claim 26, wherein emitting light to said component holder comprises emitting light to said component holder in an amount which exceeds an amount of light necessary for performing the image-pickup of said component hold face.

30. (New) A component mounting method comprising:
performing a component mounting operation that includes using a component holder to hold a component and mount said component onto a circuit board; and
after performing said component mounting operation a set number of times, determining whether or not said component holder is defective by

(i) illuminating a component hold face of a component holder by emitting light to said component holder, said component hold face having an area greater than an area of a light reflection face of a component held by said component holder, wherein said component hold face corresponds to a surface of said component holder that faces a surface of said component held by said component holder, and wherein said light reflection face corresponds to a surface of said component other than said surface of said component that faces said component hold face,

(ii) performing image-pickup of said component hold face, when illuminated by emitting the light to said component holder, so as to provide image-pickup information of said component hold face when illuminated by emitting the light to said component holder, and

(iii) determining that said component holder is defective when luminance of a non-cover region of said component hold face, based on said image-pickup information, is not smaller than a setting value, wherein said non-cover region corresponds to a region of said

component hold face other than a region of said component hold face covered by said another component.

31. (New) The component mounting method according to claim 30, further comprising:

performing a luminance reduction process on said component hold face of said component holder when said component holder is determined to be defective.

32. (New) The component mounting method according to claim 31, wherein performing said component mounting operation comprises using linearly arranged component holders to hold components and mount said components onto said circuit board by independently moving up and down said component holders, and further comprising:

prior to using said component holders to mount said components onto said circuit board, performing image-pickup of said components, held by said component holders, by using an image-pickup device that is moved below said component holders along an arrangement direction of said component holders;

detecting a position of said image-pickup device while said image-pickup device is moved below said component holders in said arrangement direction; and

controlling downward movement of said component holders based on the position of said image-pickup device as detected.

33. (New) The component mounting method according to claim 32, wherein said non-cover region of said component hold face is divided into sections such that, determining that said component holder is defective comprises determining that said component holder is defective when luminance of at least one of said sections of said non-cover region, based on said image-pickup information, is not smaller than said setting value.

34. (New) The component mounting method according to claim 33, wherein emitting light to said component holder comprises emitting light to said component holder in an amount which exceeds an amount of light necessary for performing the image-pickup of said component hold face.

35. (New) The component mounting method according to claim 31, wherein said non-cover region of said component hold face is divided into sections such that, determining that said component holder is defective comprises determining that said component holder is defective when luminance of at least one of said sections of said non-cover region, based on said image-pickup information, is not smaller than said setting value.

36. (New) The component mounting method according to claim 35, wherein emitting light to said component holder comprises emitting light to said component holder in an amount which exceeds an amount of light necessary for performing the image-pickup of said component hold face.

37. (New) The component mounting method according to claim 31, wherein emitting light to said component holder comprises emitting light to said component holder in an amount which exceeds an amount of light necessary for performing the image-pickup of said component hold face.

38. (New) The component mounting method according to claim 37, wherein performing said component mounting operation comprises using linearly arranged component holders to hold components and mount said components onto said circuit board by independently moving up and down said component holders, and further comprising:

prior to using said component holders to mount said components onto said circuit board, performing image-pickup of said components, held by said component holders, by using an

image-pickup device that is moved below said component holders along an arrangement direction of said component holders;

detecting a position of said image-pickup device while said image-pickup device is moved below said component holders in said arrangement direction; and

controlling downward movement of said component holders based on the position of said image-pickup device as detected.

39. (New) The component mounting method according to claim 30, wherein performing said component mounting operation comprises using linearly arranged component holders to hold components and mount said components onto said circuit board by independently moving up and down said component holders, and further comprising:

prior to using said component holders to mount said components onto said circuit board, performing image-pickup of said components, held by said component holders, by using an image-pickup device that is moved below said component holders along an arrangement direction of said component holders;

detecting a position of said image-pickup device while said image-pickup device is moved below said component holders in said arrangement direction; and

controlling downward movement of said component holders based on the position of said image-pickup device as detected.

40. (New) The component mounting method according to claim 39, wherein said non-cover region of said component hold face is divided into sections such that, determining that said component holder is defective comprises determining that said component holder is defective when luminance of at least one of said sections of said non-cover region, based on said image-pickup information, is not smaller than said setting value.

41. (New) The component mounting method according to claim 40, wherein emitting light to said component holder comprises emitting light to said component holder in an amount which exceeds an amount of light necessary for performing the image-pickup of said component hold face.

42. (New) The component mounting method according to claim 30, wherein said non-cover region of said component hold face is divided into sections such that, determining that said component holder is defective comprises determining that said component holder is defective when luminance of at least one of said sections of said non-cover region, based on said image-pickup information, is not smaller than said setting value.

43. (New) The component mounting method according to claim 42, wherein emitting light to said component holder comprises emitting light to said component holder in an amount which exceeds an amount of light necessary for performing the image-pickup of said component hold face.

44. (New) The component mounting method according to claim 30, wherein emitting light to said component holder comprises emitting light to said component holder in an amount which exceeds an amount of light necessary for performing the image-pickup of said component hold face.

45. (New) The component mounting method according to claim 44, wherein performing said component mounting operation comprises using linearly arranged component holders to hold components and mount said components onto said circuit board by independently moving up and down said component holders, and further comprising:

prior to using said component holders to mount said components onto said circuit board, performing image-pickup of said components, held by said component holders, by using an

image-pickup device that is moved below said component holders along an arrangement direction of said component holders;

detecting a position of said image-pickup device while said image-pickup device is moved below said component holders in said arrangement direction; and

controlling downward movement of said component holders based on the position of said image-pickup device as detected.